PERRY ELECTRIC

WALL MOUNTED AND TABLE
PROGRAMMABLE THERMOSTAT MULTI-ZONE AND MULTIMEDIA

WI-FI - RF868 MHz - M-Bus

CRM4.0

CRM031WIFI - CRM032WIFI
CRM033WIFI

New

WALL MOUNTED
PROGRAMMABLE THERMOSTATS

WI-FI

WI-FI

CR028WIFI   CR029WIFI

New

THERMOSTATS

DIGITAL

NEXT

TE028A - TE028B
TE029A - TE029B

SLIM

TE011B

TE400/B - TE410/B
TE402/B - TE411/B

ZEFIRO 80x80

TE530B - TE531B - TE532B

RECESSSED
PROGRAMMABLE THERMOSTATS - H 45 mm

WI-FI   DIGITAL "NEXT"

WI-FI

CDS29WIFI

New

SOFT TOUCH

CDS28 - CDS29

TOUCH SCREEN

CDS26 - CDS27

THERMOSTATS - H 45 mm

ELECTRONIC ELECTRONIC

MODULO

TE301/MC - TE331/MC
TE302/MC
TE303/MC - TE333/MC
TE305/MC

MODULO FANCOIL

TEF365/MC

THERMOSTATS FOR ROUND AND SQUARE BOX

ELETTRONIC

ZEFIRO

TE510A - TE510B
TE511A - TE511B
TE513A - TE513B

PERSONAL

TE101 - TE103

INDUSTRIAL TEMPERATURE CONTROL
MODULAR THERMOSTATS 2 DIN

ELECTRONIC

TE082 - TE083
TE084

TE075 - TE076
TE077 - TE078

TE052/M

CONTACT THERMOSTATS

ELECTRONIC

TB060 - TB065 - TB071
TB081 - TB088 - TB090 - TB091

DIGITAL

NEXT

CR028A - CR028B
CR029A - CR029B

UP&DOWN COMPACT

CR017AG - CR017BG
CR018AS - CR018BS

EASY

CR308/G - CR309/S

SLIM

CR311B

ELECTRONIC

ZEFIRO

TE500A - TE500B
TE501A - TE501B
TE502B
TE503A - TE503B
TE565B - TE566B

PERSONAL

TE120 - TE120/A
TE122 - TE122/A

EUROPA

TE036 - TE065
TE041
TE046

GAS ESPANSION

TEG

TEG130 - TEG131
TEG131RA - TEG132
TEG136

RECESSSED THERMOSTATS - H 45 mm

DIGITAL "NEXT"

DIGITAL "MODULO"

SOFT TOUCH

N
New

TE540
TE541 - TE541E

TOUCH SCREEN

TE542 - TE543

TE312/MC - TE322/MC
TE313/MC - TE323/MC

CONTROL DEVICES

CONTROL BOXES

BP04230 - BP08230

WIRELESS TEMPERTURE CONTROL

CRTX05

TETX04
TETX03

VTRX02

CCRX01

RX01/P
RX02/P
RX0801/P

BC0401/230
BC0801/230

CE

LVD: 2006/95/CE   EN 60730-1, EN 60730-2-9
EMC: 2004/108/CE   EN 60730-1, EN 60730-2-9

CRM4.0 – PROGRAMMABLE THERMOSTAT MULTI-ZONE AND MULTIMEDIA

- It is a programmable thermostat always connected that allows to program, manage and control the comfort of the different rooms of the house, adapting to the users' needs, reducing the energy consumption.

- Adjust up to 8 zones and 16 actuators to ensure maximum comfort and minimum waste in the various areas of the apartment. With the advanced thermoregulation module **MTE01** it can also interact with single boilers with OpenTherm protocol version 2.2 (Advanced Class V thermoregulation).

- Simple to install and use, it can also be managed by remote through the APP that can be downloaded on smartphones and tablets.

- Equipped with software for integration and Alexa voice commands.

Ready for the home automation functions of the home: shutters, curtains, lights, irrigation…

CRM4.0 system complies with the European directive 2014/53/UE (RED).

CRM4.0 is available in 3 versions:

1DOCRM031WIFI

Wall mounted model equipped with:
- Wi-Fi
- Alexa voice assistance Software
- RF 868 MHz
- M-BUS radio 868 MHz
- 1 relay
- Internal temperature probe
- Remote probe input
- Built-in power supply

1DOCRM032WIFI

Wall mounted model equipped with:
- Wi-Fi
- Alexa voice assistance Software
- RF 868 MHz
- M-BUS radio 868 MHz
- RS485 (for control box)
- Internal temperature probe
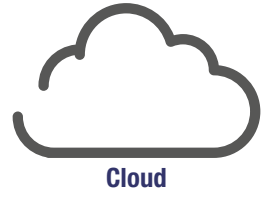- Remote probe input
- Built-in power supply

1DOCRM033WIFI
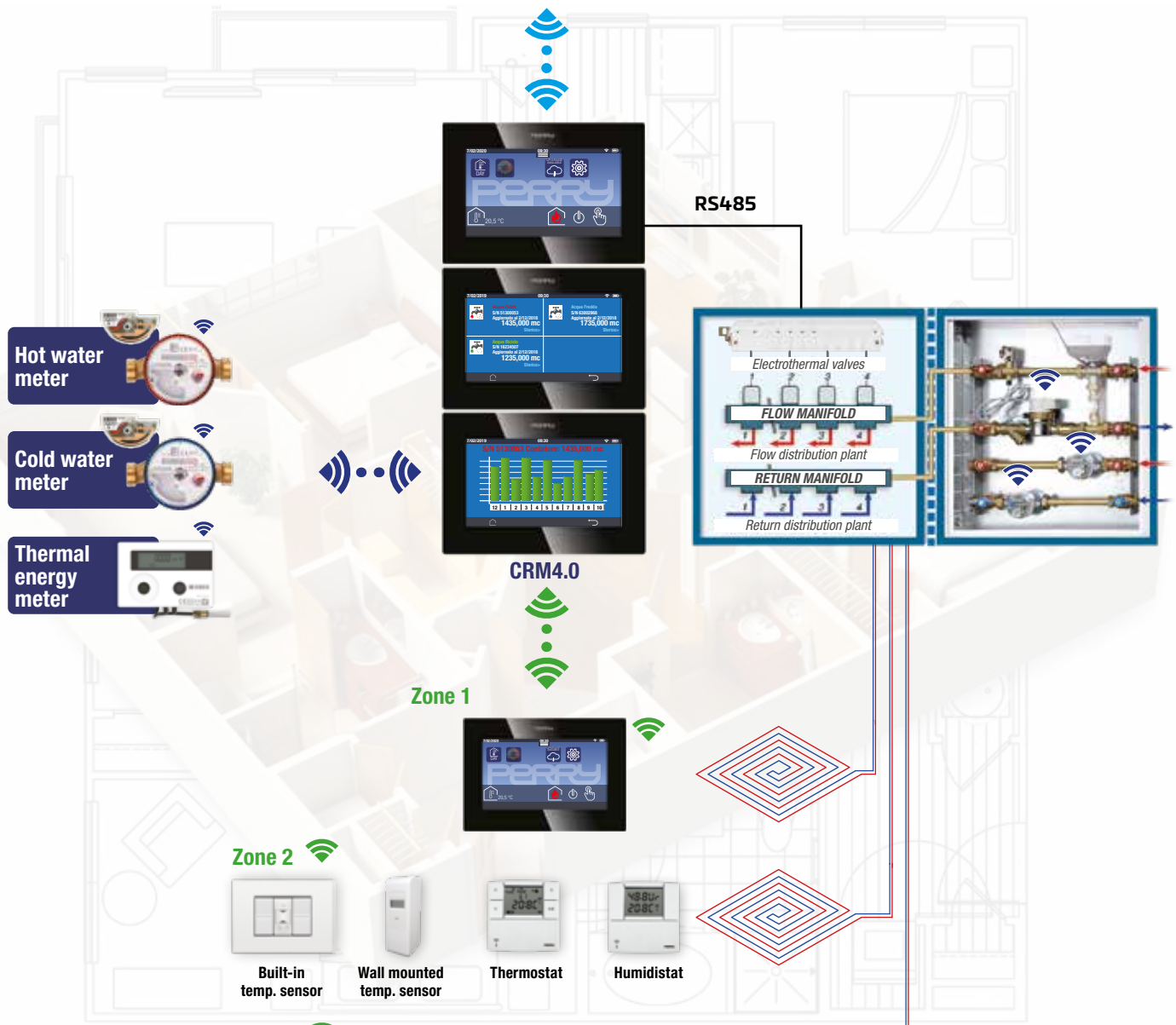
Table model equipped with:
- Wi-Fi
- Alexa voice assistance Software
- RF 868 MHz
- M-BUS radio 868 MHz
- Internal temperature probe
- Plug-in power supply
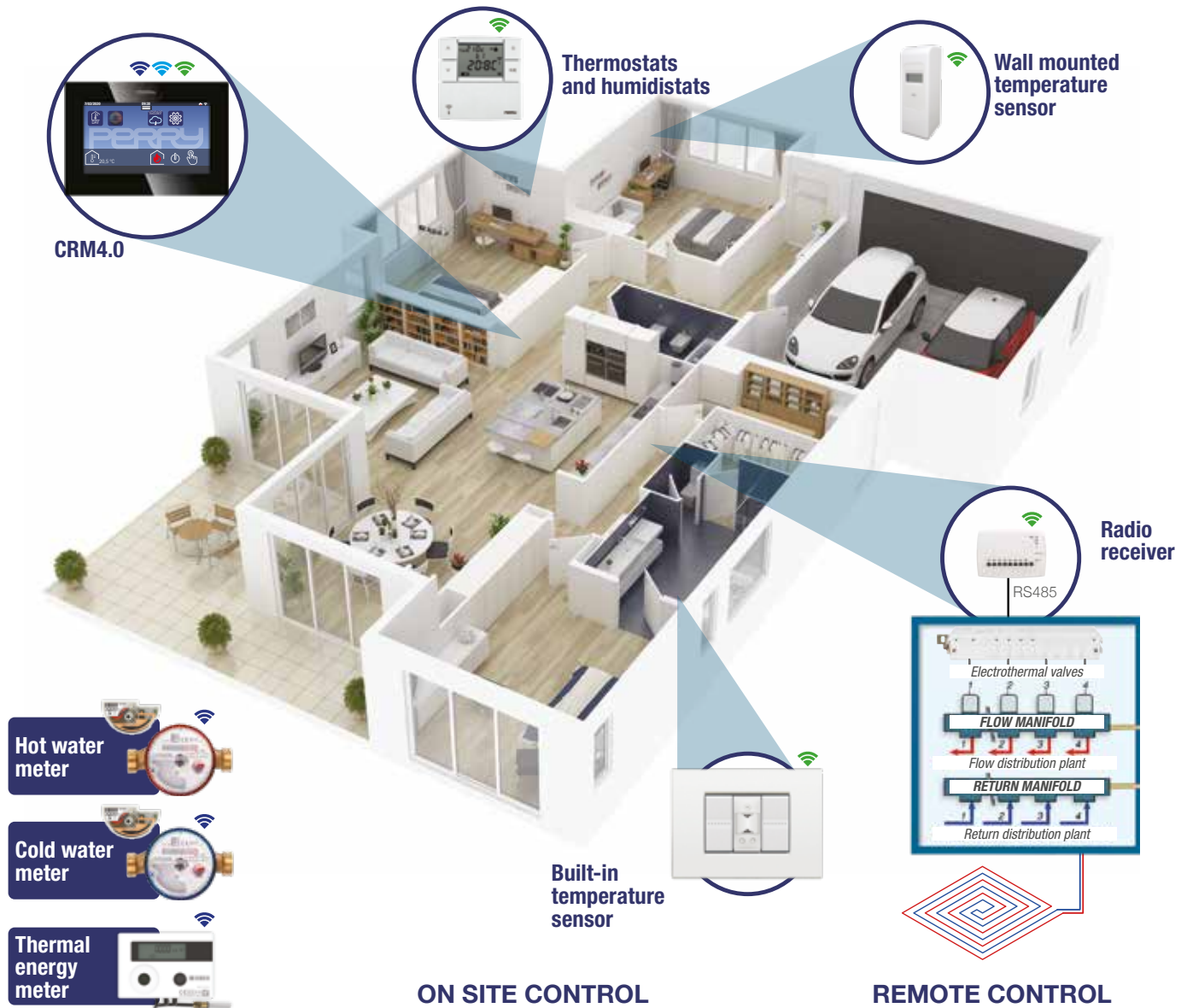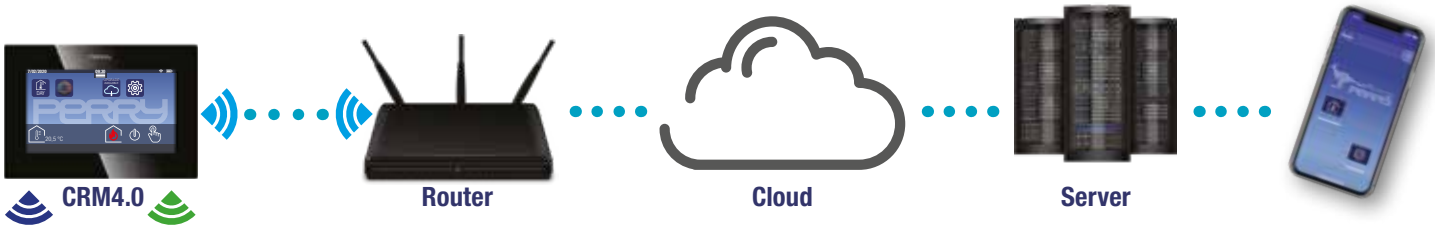
GENERAL INSTALLATION SCHEME

ON WEB

Server

Cloud

IN THE APARTMENT

Router

RS485

Hot water meter

Cold water meter

Thermal energy meter

CRM4.0

Electrothermal valves

FLOW MANIFOLD

Flow distribution plant

RETURN MANIFOLD

Return distribution plant

Zone 1

Zone 2

Built-in temp. sensor

Wall mounted temp. sensor

Thermostat

Humidistat

Zone 3

Built-in temp. sensor

Wall mounted temp. sensor

Thermostat

Humidistat

Legenda

- 📶 Wi-Fi
- 📶 RF 868Mhz
- 📶 M-BUS radio
- — BUS RS485
- ▬ Hot and cold water

PERRY

7

PROGRAMMABLE THERMOSTAT MULTI-ZONE AND MULTIMEDIA

CRM4.0 can be programmed and controlled both on site and by remote via internet for the access to the cloud. The **CRM4.0** 868 MHz frequency allows to reach each side of your home.

CLOUD WEB CONNECTION

CRM4.0

Router

Cloud

Server

CRM4.0

Thermostats and humidistats

Wall mounted temperature sensor

Radio receiver

RS485

Electrothermal valves

FLOW MANIFOLD

Flow distribution plant

RETURN MANIFOLD

Return distribution plant

Hot water meter

Cold water meter

Thermal energy meter

Built-in temperature sensor

ON SITE CONTROL

REMOTE CONTROL

CRM4.0

Consumptions

Statistics

Smartphone or tablet

Legenda
- Wi-Fi
- RF 868Mhz
- M-BUS radio
- BUS RS485
- Hot and cold water

CRM4.0.0 is able to thermoregulate any type of installation

Available on the App Store

Get it on Google play

System complying the **European Directive 2014/53/EU (RED)**

7/02/2021   09:30
UPGRADE AVAILABLE
DAY
20,5 °C

THERMOREGULATION

Wireless thermoregulation of each room or per zones

CRM4.0 can manage up to a maximum of 8 zones and 16 actuators.

7/02/2019   09:30
zona1
22:30
06:30
08:00

With **CRM4.0** or smartphone you can regulate the temperature of each room or zone.
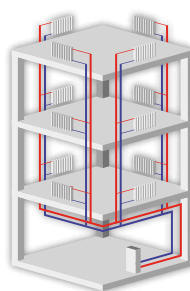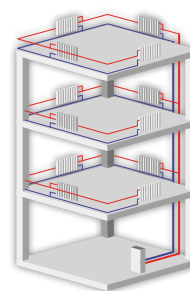
SENSORS

ACTUATORS

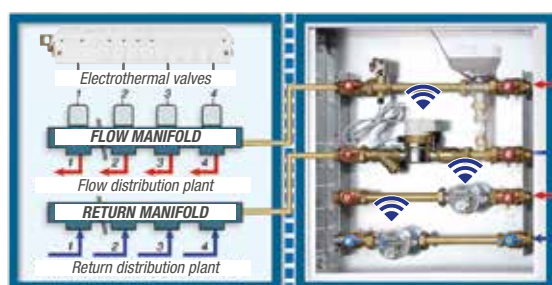**Suitable for all types of installation with any type of system**

EXISTING SYSTEMS

Riser systems

Ring systems

RENOVATED OR NEW INSTALLATIONS WITH ZONE HEATING

Electrothermal valves
FLOW MANIFOLD
Flow distribution plant
RETURN MANIFOLD
Return distribution plant

RENOVATED OR NEW INDEPENDENT HEATING INSTALLATIONS

7/02/2019
20,5 °C

1DO CRM032WIFI   **1DO MTE01**   **BOILER**

MULTI-ZONE PROGRAMMABLE THERMOSTAT MULTIMEDIA INTERFACE

CRM4.0 is a user friendly system, easy to manage for all types of users.

THERMOREGULATION MENU ON CRM4.0

Overview of temperatures regulation

Overview of time profiles and temperature sets

 1 operation

 2 operations

 3 operations

By selecting, it changes the management from heating to air conditioning

 summer   winter

Thermal season selection

EASY MODE

To simplify, it is also possible to activate a practical and simple function called "EASY MODE".
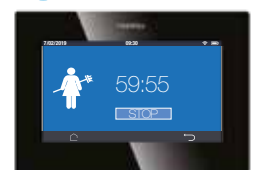**CRM4.0** will autonomously perform the necessary procedures to obtain the optimal thermal comfort desired in each zone.
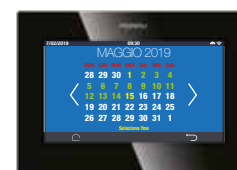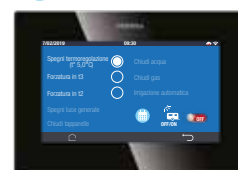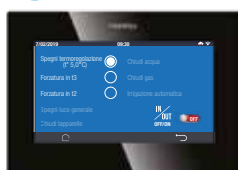
QUICK FUNCTIONS

CRM4.0 is equipped with a drop-down menu which can be recalled by scrolling from top to bottom.
From this menu with rapid selection the user can access the most used functions to control the entire system:
• IN/OUT function
• Holiday function
• Cleaning function

 In/Out

 Holiday

 Cleaning

"Special functions" allow scenarios when cleaning, when leaving or entering the house, or when scheduling vacation times. Everything can be controlled quickly from the **CRM4.0** or smartphone.
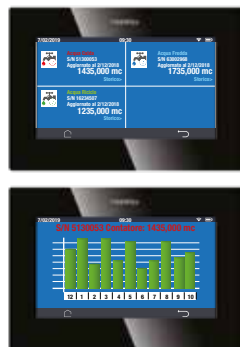
THERMOREGULATION MENU ON SMARTPHONE

1 operation

2 operations

3 operations

EASY MODE

QUICK FUNCTIONS

By selecting, it changes the management from heating to air conditioning

summer

winter

CONSUMPTION DISPLAY

ALEXA VOCAL ASSISTANT
(available from 2023)

"Alexa, read the temperature zone ...."

"Alexa, raise/lower zone temperature ...."

"Alexa, sets zone temperature ...."

"Alexa, read the set temperature of the zone ...."

"Alexa, activate automatic programming"

"Alexa, enable/disable cleaning function"

"Alexa, turn on/off everything"

"Alexa, turn ON/OFF everything" (IN/OUT function)

MULTI-ZONE PROGRAMMABLE THERMOSTAT

MULTI-ZONE MULTIMEDIA PROGRAMMABLE THERMOSTAT COMMON FEATURES CRM 4.0

- Power supply 230V AC 50Hz/5Vdc included in the package
- 4.3" TFT color scrolling touch screen display
- No. 8 programmable zones for hourly profiles on 4 temp. levels
- Zone programming: daily and weekly
- Communication systems: Wi-Fi for internet connection; Wireless RF 868 Mhz for communication with ancillaries; MBus Radio; Bus RS485
- Calculation of the anti-condensation dew point
- Temperature setting range +4°C ÷ +39°C

- Connection range 30 ÷ 120 m in relation to the wall structure and obstacles inside the rooms
- Accuracy ±0.5 °C
- Gradient 1°K / 15 min
- Regulation type: modulating or ON/OFF
- IP30
- Operating temperature -5°C ÷ +55 °C
- Storage temperature -5°C ÷ +55°C
- Dimensions (L x W x H) 128.5 x 26 x 88.5 mm

1DO CRM031WIFI Wall-mounted multi-zone programmable thermostat with display

- Wired relay output 5(3)A 250V AC.
- Wi-Fi
- Frequency RF 868 MHz
- MBus Radio (Reading meters compatible)

- Input remote temperature probe 1PA STE02 usable as 2nd zone
- Wall installation

1DO CRM032WIFI Wall-mounted multi-zone programmable-thermostat with display and BUS 485 connection for distribution box and/or single boiler

- BUS RS485 Output for actuator connections
- Wi-Fi
- Frequency RF 868 MHz
- MBus Radio (Reading meters compatible)

- Input remote temperature probe 1PA STE02 usable as 2nd zone
- Wall installation

1DO MTE01 Advanced thermoregulation module for 1DO CRM032WIFI for single boiler

- Suitable for boilers with OpenTherm protocol 2.2 (evolved thermoregulation Class V)

1DO CRM033WIFI Multi-zone desktop programmable thermostat with display

- Wi-Fi
- Frequency RF 868 MHz

- MBus Radio (Reading meters compatible)
- Table installation

1DO TETX05 Wall-mounted RF zone thermostat, IP30

- Power supply 2x1.5V AA type batteries - Alkaline
- 2 "1/3 digital LCD display
- Bidirectional RF868 MHz wireless radio connection
- Connection range 30 ÷ 120 m
- Temperature adjustment range +4 ÷ +39 ° C

- Accuracy ± 0.5 ° C
- Gradient 1 ° K / 15 min.
- Type of regulation: modulating or ON / OFF
- Autonomy about 2 years
- Dimensions (L x W x H) 84 x 23 x 84 mm

1DO STX01 RF ambient wall temperature probe, IP30

- Power supply 2x1.5V AAA - Alkaline batteries
- 5 digit TRH LCD display with temperature signaling environment, low battery, offset, background noise
- Bidirectional RF868 MHz wireless radio connection
- Connection range 30 ÷ 100 m
- Measuring range -30 ÷ +70 ° C

- Accuracy ± 0.1 ° C
- Gradient 1 ° K / 15 min.
- Autonomy about 3 years
- Wall installation
- Dimensions (L x W x H) 40 x 95 x 23 mm

1DO STX03A Built-in RF room temperature probe in 1 civil module, anthracite color, IP40
1DO STX03B Built-in RF room temperature probe in 1 civil module, white color, IP40

- Power supply 230V a.c.
- Bidirectional RF868 MHz wireless radio connection
- Connection range 30 ÷ 100 m
- Measuring range -30 ÷ +70 ° C

- Accuracy ± 0.1 ° C
- Gradient 1 ° K / 15 min.
- Installation of 1 civil module in flush-mounted box
- Dimensions (L x W x H) 40 x 95 x 23 mm

1DO RXTEUM01 Wall-mounted combined temperature + relative humidity probe, IP30

- Power supply 2x1.5V AA type batteries - Alkaline
- 2 "1/3 digital LCD display
- Bidirectional RF868 MHz wireless radio connection
- Connection range 30 ÷ 120 m
- Temperature adjustment range +4 ÷ +39 ° C

- Relative humidity % adjustment range from App
- Accuracy ± 0.1 ° C
- Gradient 1 ° K / 15 min.
- Autonomy about 3 years
- Dimensions (L x W x H) 84 x 23 x 84 mm

1DO VTRX05 Electronic valve for radiators with 868.35Mhz radio transceiver, IP40

- Power supply 3V 2x1.5V AA batteries - Alkaline
- Built-in room temperature probe
- Operation with ON / OFF or modulating intervention
- Autonomy about 12 months depends on the daily operations
- Max pushing force in closing 8 Bar
- Compatible with thermostatic valves with PN (Nominal flow rate) 8 Bar and ΔP (differential) 1 Bar
- Battery charger and / or anomalies indication
- Dimensions (L x Ø) 85.5 x 53 mm

1DO VTRX04 Electronic valve for radiators with 868.35Mhz radio transceiver

- Power supply 3V 2x1,5V size C alkaline
- ON/OFF or modulating operation
- IP40
- Autonomy 36 months based on daily intervention
- Max pressure in closing 10 Bar
- Compatible with thermostatic valves with PN (Nominal flow) 10 Bar and Δ P (differential) 1 Bar
- RF signal level indicator
- Faulty and / or battery charge indicator
- Dimensions (L x W x H) 62 x70 x 97 mm

1PA ASVT01	**Angle adapter for electronic valves on radiator VTRX04**
1PA CA02VT	**Tamper-proof seal for electronic valves on radiator VTRX04**
1PA CA03VTF	**Female unscrewing collar for electronic valves on radiator VTRX04**
1PA CA03VTM	**Male unscrewing collar for electronic valves on radiator VTRX04**

1DO RTX01DO Radio transceiver 1 channel 230V a c
1DO RTX02DO Radio transceiver 2 channels 230V a c

- Power supply 230V a.c. 50 ÷ 60 Hz
- Bidirectional wireless radio RF868 MHz connection
- 1DO RTX01DO 1 changeover contact output 5(2)250V a.c. 1 ⌁
  1DO RTX02DO 2 changeover contacts output 5(2)250V a.c. 2 ⌁ + 1 ⌁ pump
- ON /OFF operation
- Connection range 30 ÷ 120 m
- IP30
- Wall mounting
- Dimensions (L x W x H) 133 x 90 x 25 mm

1DO RTX0801DO 8-zones radio transceiver + 1 circulation pump output

- Power supply 18V a c (from the control box)
- BUS RS485 output
- Bidirectional wireless radio RF868 MHz connection
- Connection range 30 ÷ 120 m
- Insulation class III
- IP30
- Wall mounting
- Dimensions (L x W x H) 133 x 90 x 25 mm

1DO BC0400   4 zones control box
1DO BC0800   8 zones control box

- Power supply 230V a.c. 50 ÷ 60 Hz
- Contacts output 8(2)A 250V a.c.
- BC0400 4 polarized NO/NC contacts ⌁ + 1 ⌁ pump
  BC0800 8 polarized NO/NC contacts ⌁ + 1 ⌁ pump
- IP 52 with rubber cable glands
- Insulation Class II
- Box, wall, with brackets installation
- Dimensions (L x W x H) 273 x 69 x 76 mm

1PA PPBC01	**Cable glands for control boxes**
11SE AEDS	**Electro-thermal actuator for thermostatic valve 230V NC**

ACCESSORIES

1DO SWCDM01	**C.DOM Manager Software to control CRM4.0 from PC**
1PA STE02	**NTC temperature probe with 4 m cable for 1DO CRM031WIFI and 1DO CRM032WIFI**
1PA BTTETX01	**Table base for 1DO TETX05 and 1DORXTEUM01**
1PR PSA01	**Replacement batteries for TETX05, RXTEUM01, VTRX05**
1PR PMS01	**Replacement batteries for STX01**
1PR PMT02	**Replacement batteries for VTRX04**
1VA ROUTER002	**Router LTE/4G with batteries**

NOTE
1) For the installation of CRM4.0 it is essential to have a Wi-Fi network. In case not available, use item 1VA ROUTER002 for the installation.
2) The configuration (first installation) of CRM4.0 with ancillaries: temperature probes, thermostats, humidistats, radio receivers, VTRX04, VTRX05; is possible only with Android Smarthphones.

COMPACT MECHANICAL ENERGY METERS

1DO CC15R03
Hot/cold mechanical energy meter DN15, M-BUS radio reading
1DO CC25R03
Hot/cold mechanical energy meter DN20, M-BUS radio reading

- Inductive bidirectional scanning single jet meter
- Reverse flow detection
- Temperature measurement cycle 2-60 sec.
- Installation in output
- Horizontal/vertical installation
- Temperature probes Pt1000 with cable length 1,5 meters
- Directive 2004/22/EC (MID MI-004) and in compliance with EN 1434

ELECTRONIC UNIT
- Replaceable 3V lithium battery, useful life 10 years
- Removable electronic unit, cable length 50 cm
- Protection class: IP65
- Operating temperature 5-55°C
- 8 digits LCD display (up to 3 decimal places)

CODE	Nominal flow rate Qp (m3/h)	DN	External thread	Lenght (mm)	PN (bar)	Max. flow rate Qs (m3/h)	Min. flow rate Qi (l/h)	Pressure drop Δp at Qp (bar)	Pressure drop Δp at Qs (bar)	Heat temp. range (°C)	Refrigeration temp. range (°C)
1DO CC15R03	1,5	15	G¾"B	110	16	3	60	0,2	0,84	15 - 90	5 - 90
1DO CC25R03	2,5	20	G1"B	130		5	100	0,17	0,675		

COMPACT ULTRASONIC ENERGY METERS

1DO UL1520R01
Compact hot/cold ultrasonic energy meter DN15, M-BUS radio reading
1DO UL3525R01
Compact hot/cold ultrasonic energy meter DN20, M-BUS radio reading

- Reverse flow and air presence detection
- Measuring element with no moving parts
- Installation possible in all positions in output
- Straight sections not required
- Pt1000 temperature probes with 1.5 m cable length
- MID 2004/22/EC certification (EN 1434), class 2

ELECTRONIC UNIT
- Replaceable 3V lithium battery, service life 10 years
- Removable electronic unit, cable length 85 cm
- Protection class: IP65
- Operating temperature 5-55°C
- 8-digit LCD display (up to 3 decimal places)
- Memory of max. flow rate and power values

CODE	Nominal flow rate Qp (m3/h)	DN	External thread	Lenght (mm)	PN (bar)	Max. flow rate Qs (m3/h)	Min. flow rate Qi (l/h)	Pressure drop Δp at Qp (bar)	Pressure drop Δp at Qs (bar)	Heat temp. range (°C)	Refrigeration temp. range (°C)
1DO UL1520R01	1,5	15	G¾"B	110	16	3	0,015	0,21	0,85	15 - 90	5 - 90
1DO UL3525R01	3,5	20	G1"B	130		7	0,035		0,885		

ACCESSORIES
1DO 131205002 Fitting set DN20 ¾"x½" for heat meters CC15 / UL15
1DO 131207002 Fitting set DN25 1 "x¾" for heat meters CC25 / UL35

HOT/COLD SANITARY WATER METERS

1DO CACS2503
Domestic hot water meter DN15 connections 80 mm, M-BUS ready
1DO CACS2502
Domestic hot water meter DN15 connections 110 mm, M-BUS ready
1DO CACS4002
Domestic hot water meter DN20 with 130 mm connections, M-BUS ready
1DO CAFS2503
Domestic cold water meter DN15 connections 80 mm, M-BUS ready
1DO CAFS2502
Domestic cold water meter DN15 connections 110 mm, M-BUS ready
1DO CAFS4002
Domestic cold water meter DN20 with 130 mm connections, M-BUS ready

• Single jet meter and dry dial
• Magnetic drive
• 360° rotating cover

• Condensation-proof dial
• MID 2004/22/CE Approved Range 160-H and 50 -V
• Certified for use with drinking water (D.M. 174)

CODE	Nominal flow rate Qp (m3/h)	DN	External thread	Lenght (mm)	PN (bar)	Maximum flow rate Qs (m3/h)	Minimum flow rate Qi (l/h)	Operating temperature (°C)	Pulse value (l)	Min. reading (l)
1DO CACS2503	2,5	15	G¾"B	80	16	3,13	25	water 90°C	-	0,05
1DO CACS2502				110						
1DO CACS4002	4,0	20	G1"B	130		5,0	40		-	0,05
1DO CAFS2503	2,5	15	G¾"B	80		3,13	25	water 50°C	-	0,05
1DO CAFS2502				110						
1DO CAFS4002	4,0	20	G1"B	130		5,0	40		-	0,05

1DO MBR03
MBR03 M-BUS radio transmitter module for M-BUS-ready meters

•Transmission of consumption data relative to the last 15 month-ends
•Protection degree: IP68

• Automatic radio activation
• The installation of the M-BUS radio module must be simultaneous with the installation of the water meter
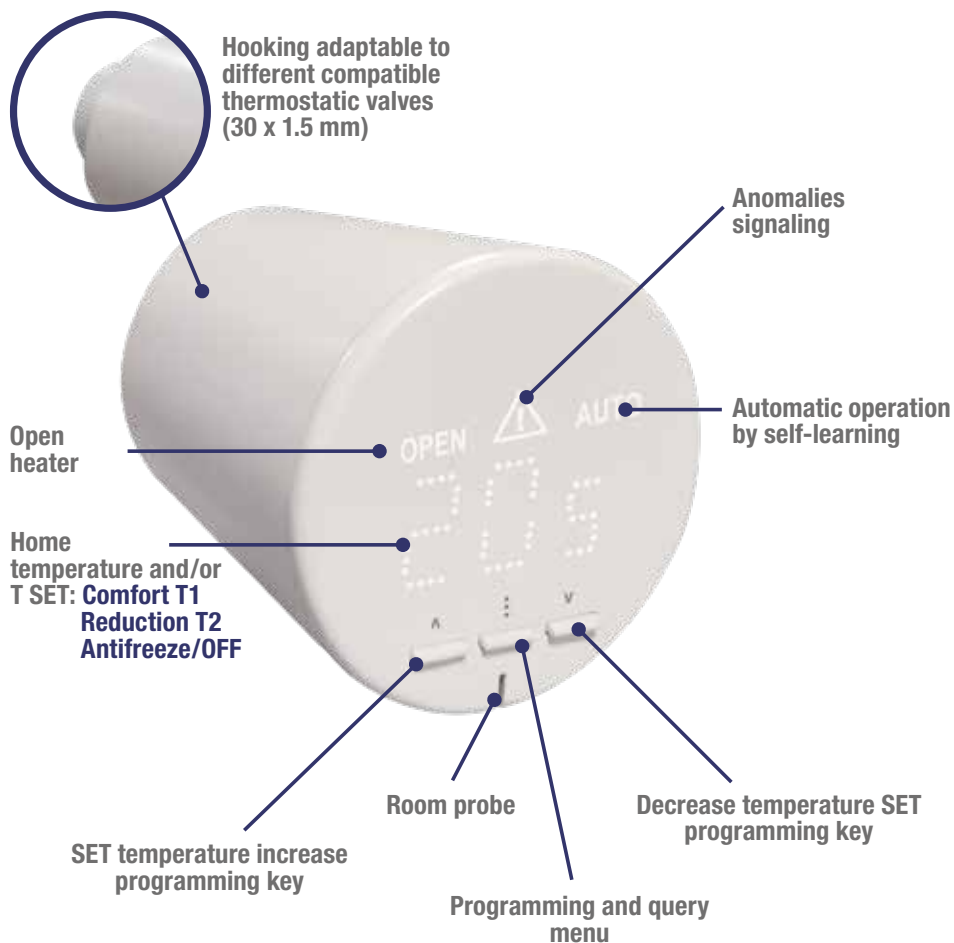
VTRX05 ELECTRONIC VALVE

VTRX05 INTELLIGENT ELECTRONIC VALVE FOR RADIATORS AND TOWEL WARMERS

The most advanced and efficient answer for the thermoregulation of every radiator.

The **VTRX05** intelligent electronic valves installed in radiator systems can be associated to **CRM4.0** for the realization of multimedia multizone systems and/or installed stand alone on radiators/towel warmers of the house.

The **VTRX05** installed stand-alone allow to turn on radiators with precise regulation of temperature set T1 (comfort temperature), T2 (reduction temperature) through the valve frontal buttons.

The **VTRX05**, equipped with intelligent self-learning, regulate the hourly periods of comfort (T1) and reduction (T2) according to the trend of life of the user thus assuming the function of daily programmable thermostat applied to each radiator of the house.

Hooking adaptable to different compatible thermostatic valves (30 x 1.5 mm)

Anomalies signaling

Automatic operation by self-learning

Open heater

Home temperature and/or T SET: **Comfort T1 Reduction T2 Antifreeze/OFF**

Room probe

Decrease temperature SET programming key

SET temperature increase programming key

Programming and query menu

TECHNICAL NOTE

VTRX05 is realized with hardware and firmware solutions that allow to reduce the natural difference between temperature measured by VTRX probe and real room temperature.

Moreover, through the valve menu it is possible to access the off-set function for further adjustments between the value read by the VTRX temperature probe and the real room temperature.

The **VTRX05** valve is realized with modulating operation of the thermostatic valve to minimize the energy consumption of each radiator.

The stand-alone installation of the intelligent electronic valve **VTRX05** is easy to use for the reduction of energy consumption from heating of:

• Radiators and towel warmers installed in apartments
• Radiators installed in public places: offices, stores, schools, etc.
• Radiators installed in hotel rooms, RSA, etc.

INDIRECT METERING

NEW ALLOCATORS OMS COMPATIBLE

1SE100301
GIUSTO-100N2 allocator

1SE100302
GIUSTO-100NE2 allocator

1SE100301 - GIUSTO-100N2 ALLOCATOR

OMS compatible allocator for displaying the heat consumption units of the radiator.
Safe and precise, applied on each radiator, it allows the precise calculation of consumption thus obtaining a quantification of the thermal consumption and, consequently, of the costs.

The transmission of the daily consumption data is sent to the receiving device together with the consumption of last 7 days and consumption of the last 12 months.

The Giusto-100N2 allocator can provide for two-way communication for the fifteen days following installation in order to allow parameterization at a later time without necessarily having to access the home. After 15 days or immediately after parameterization, it switches to OMS compatible one-way.
The allocator is approved according to the European standard EN834 and is powered by long-lasting batteries.

1SE100302 - GIUSTO-100NE2 ALLOCATOR

Electronic heat cost allocator equipped with a remote probe suitable in case of convectors, radiators covered by radiator covers and / or various obstructions.
The device is fixed to the wall following the specifications of the legislation while the external probe is fixed on the heating body.

Included in the package:
• zamak plate with remote probe
• 2 screws and 2 fischer
• 1 seal and 1 anti-burglary label
• 1 small lid
• 2 plastic clamps

CONSULTATION OF CONSUMPTION DATA

The "ticks" relating to consumption are displayed thanks to the clear parameterization of the heat cost allocator on the basis of the heat output and the type of heating body.
The reader acquires consumption data in WBF through a WSL868 key and EQUO software or, alternatively, through a remote reading thanks to floor control units and master control unit which autonomously posts the data on the server.
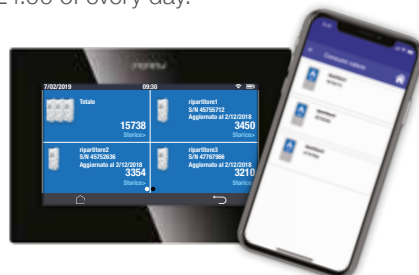
As per the recent regulations that suggest periodic consultation of the consumption data, the WEB portal is available which draws from the server the data and makes them easily accessible to the system manager, the condominium administrator and the individual condominium. The portal allows viewing consumption of heating and consumption of cold and domestic hot water, facilitating the perception of the trend through graphic representations expense by the User.

INDIRECT METERING COLLECTIONG DATAS WITH CRM4.0

The allocators GIUSTO-100N2 and GIUSTO-100NE2 combined with CRM4.0 allow the reading of the consumption data on Smartphone and Tablet with updated data at 24:00 of every day.

CRM4.0 can read up to a maximum of 16 allocators

Reading the daily saved consumption data received from all allocators connected to CRM4.0.

Graphic reading of the consumption trend of the single device.

FIXING ACCESSORIES

CODE	DESCRIPTION
2SE007KTS	Standard fixing kit for 1SE100301: 1 zama plate, 2 trapezoidal anchor, 2 screws TC m4x40
2SE100202	TAMPER-PROOF SEAL for 1SE100301, package 50 pcs.
2SE100302	WIDE 55 ALUMINIUM PLATE - 55 mm wide - package 10 pcs. (for 1SE100301 order separately 2SE100304)
2SE100303	WIDE 88 ALUMINIUM PLATE - 88 mm wide- package 10 pcs. (for 1SE100301 order separately 2SE100304)
2SE100304	STANDARD ZAMA PLATE - 10 pcs. for 1SE100301
2SE100401	STANDARD TRAPEZOIDAL ANCHOR - 35 mm wide on long side - package 50 pcs.
2SE100402	WIDE 50 TRAPEZOIDAL ANCHOR - 50 mm wide on long side - package 20 pcs.
2SE100403	SHAPED ANCHOR P.45 - distance between pipe (pitch) 45 / 46 mm - package 20 pcs.
2SE100404	EXPANSION CORNER - the package includes the expansion corners, M4 hex nuts and M4 x 35 cylinder head screws - package 20 pcs
2SE100405	M3 THREADED PLATE 16x6x4 - for M3 screws - package 50 pcs.
2SE100407	M4 THREADED PLATE 30x6x6 - for M4 screws - package 50 pcs.
2SE100701	M3 FLANGED HEX NUT - package 100 pcs.
2SE009KTS	Metal clamp kit composed by: a 1 meter metal belt, 4 steel heads with screw, 4 washers, 4 Yellow tamper-proof seals, 4 M3 nuts and 4 studs M3x10
2SE008KTS	U-Bolt kit composed by: 1 U clevis, 4 nuts M3 and central aluminium body
2SE100601	Self-Tapping Screw. Made of galvanized iron, cylindrical head 2.9 x 25 mm - package 100 pcs.
2SE100602	Self-Tapping Screw. Made of galvanized iron, cylindrical head 3.9 x 25 mm - package 100 pcs.
2SE100610	Self-Tapping Screw. Made of galvanized iron, cylindrical head 4.2 x 16 mm - package 100 pcs.
2SE100603	Self-Tapping Screw. Made of galvanized iron, cylindrical head 4.8 x 25 mm - package 100 pcs.
2SE100608	Self-Tapping Screw. Made of galvanized iron, cylindrical head 5.5 x 25 mm- package 100 pcs.
2SE100501	M3 X 10 welding stud- package 100 pcs.
2SE100502	M3 X 20 welding stud - package 100 pcs.
2SE100604	M3 x 30 cylindrical head screw - package 100 pcs.
2SE100606	M4 x 40 cylindrical head screw - package 100 pcs.
2SE100607	M4 x 60 cylindrical head screw - package 100 pcs.
2SE100609	M4 x 100 cylindrical head screw - package 100 pcs
2SE100900	Special Meter specially studied for a safe and easy identification at the 75% high of the heating body.
2SE100800	Pattex two-component adhesive 2K tube Metal
2SE002KTS	Fixing kit for use of two-component adhesive on 1SE100301 comprehensive of: 1pc. standard aluminum plate with 2pcs. M3x10 studs. Order separately: 2pcs. M3 hex nuts, 1pc. tamper-proof seal (2SE100201 or 2SE100202 based on allocator model) and 1pc. standard zama plate (2SE100304) if for 1SE100301 - 10 pcs.
2SE003KTS	Fixing kit for use of two-component adhesive for 1SE100301 comprehensive of: 1pc. 55 wide aluminum plate with 2pcs. M3x10 studs. Order separately: 2pcs. M3 hex nuts, 1pc. tamper-proof seal (2SE100201 or 2SE100202 based on allocator model) and 1pc. standard zama plate (2SE100304) if for 1SE100301 - 10 pcs.
2SE004KTS	Fixing kit for use of two-component adhesive for 1SE100302 comprehensive of: 1pc. standard aluminum plate with 2pcs. M3x10 studs. Order separately: 2pcs. M3 hex nuts,1pc. tamper-proof seal - 10 pcs.
2SE005KTS	Fixing kit for use of two-component adhesive for 1SE100302 comprehensive of: 1pc. 55 wide aluminum plate with 2pcs. M3x10 studs. Order separately: 2pcs. M3 hex nuts, 1pc. tamper-proof seal - 10 pcs.

CONCENTRATOR OF THE FLOOR

1SE100901 NODO-1000R landing repeater 3v battery operated

- The landing control unit to collect via radio and the transmit data concerning the consumption of a number of apartments to the concentrator gateway with GPRS modem.
- A concentrator can be installed each 2-3 floors, depending on the geometry of the building and the actual radio range obtainable.
- The concentrator as per set schedule collects the readings from all radio devices and sends them to the concentrator with GPRS modem.

CONCENTRATOR GPRS

1SE100902 NODO-1000RG concentrator with GPRS modem 230v a.c

- Concentrator with built-in GPRS modem
- It allows the communication of consumption together with any faults and tampering to the service center
- A concentrator with GPRS modem is installed for each building or staircase, depending on the geometry of the building and the actual radio range obtainable
- Network configuration of the landing repeater NODO-100R, by EQUO Software
- With scheduled readings, it reads the devices of its radio area, stores data and send them to the service center
- Compatible only with SIM M2M Vodafone (check with other operators)
- Dimensions L x P x H mm: 210x200x50

AMBIENT TEMPERATURE RECORDER

1SE100911 GRADO-200R temperature logger

- It detects the ambient temperature and calculates the medium value of the detected temperatures read on three time slots.
- The device stores every day the three medium temperature T1, T2, T3 for a period of 18 months
- The stored data read via radio from the outside of the building by WSL key 1SE100801 / WSL key 1SE100802 with communication secured by password.
  Alternatively, with control units Nodo-1000R / Nodo-1000RG / Nodo-1001ME if the installation is equipped.
- Equipped with anti-tempering system.

EQUO It's a software to carry out the measurement of the thermal power installed in a condominium, parameterizes the allocators and pulse counters, reads the seasonal consumption and allocates the heating costs. It is easily installed on a standard PC and interacts via radio with the WSL Key for reading and managing the allocators. EQUO is not available for Apple computers.
The reading and management of the allocators can be performed remotely through the installation of repeaters and concentrators RETE-1000R, RETE-1000RG. It is available in 3 versions:

1SE 101201 EQUO PROFESSIONAL
For thermo-technical professionals
• Selection heater and input heater data
• Design of heat regulation components (valves, heads, lockshields)
• Determine the installed power
• Determine the parameters to set in the allocators
• Generate the report of the installed thermal power for the certification by authorized technical personnel
• Calibrate the presetting of the thermostatic valves

Allows you to store neatly the data for the calculation of the power of radiators, evaluated according to the UNI EN 442:2004 (manufacturer's data archive), imputes, eventually, the power of the intake pipes flow and return; stores the data of the valves and lockshields. Suited to detect the total power of the apartment with detail of single radiator, the thousandths craft of the power installed, the total power of the system. Processes data to perform the calibration of pre-adjustable valves.

1SE 101202 EQUO ENTERPRISE
For allocation service manager
• Manage user details
• Acquisition of faults on allocators and pulse counters via radio
• Read data, via radio, memorized by allocators and pulse counters
• Consumption validation
• Individual allocation of the heating costs
• Generation of allocations reports in PDF and EXCEL

It has the features of the Professional version and in addition it reads the data via radio of the heat cost allocators, allows the validation of consumption for periods (season, monthly) and allows the use of different algorithms to estimate any missing consumption. In the cost allocation phase, it allows you to produce a detail of the relevant expenses divided into expenses for thermal power used and expenses according to consumption, according to the UNI 10200 sector technical standard. The UNI10200 cost allocation module also provides for the presence of heat meters direct and domestic hot water meters.

1SE 101203 EQUO FULL
For installers
EQUO FULL offers the functionalities of the 2 versions above and also allows the installation and the maintenance of allocators and pulse counters, the local and remote parametrisation as well as protection enabling of the system.

1SE 100801 WSL small key
(Wireless Serial Link) for radio communication from the landing of the building between laptop and allocators / pulse counters via EQUO software. Necessary to carry out readings onsite and to manage the devices. The key allows up to 10.000 parameterizations.
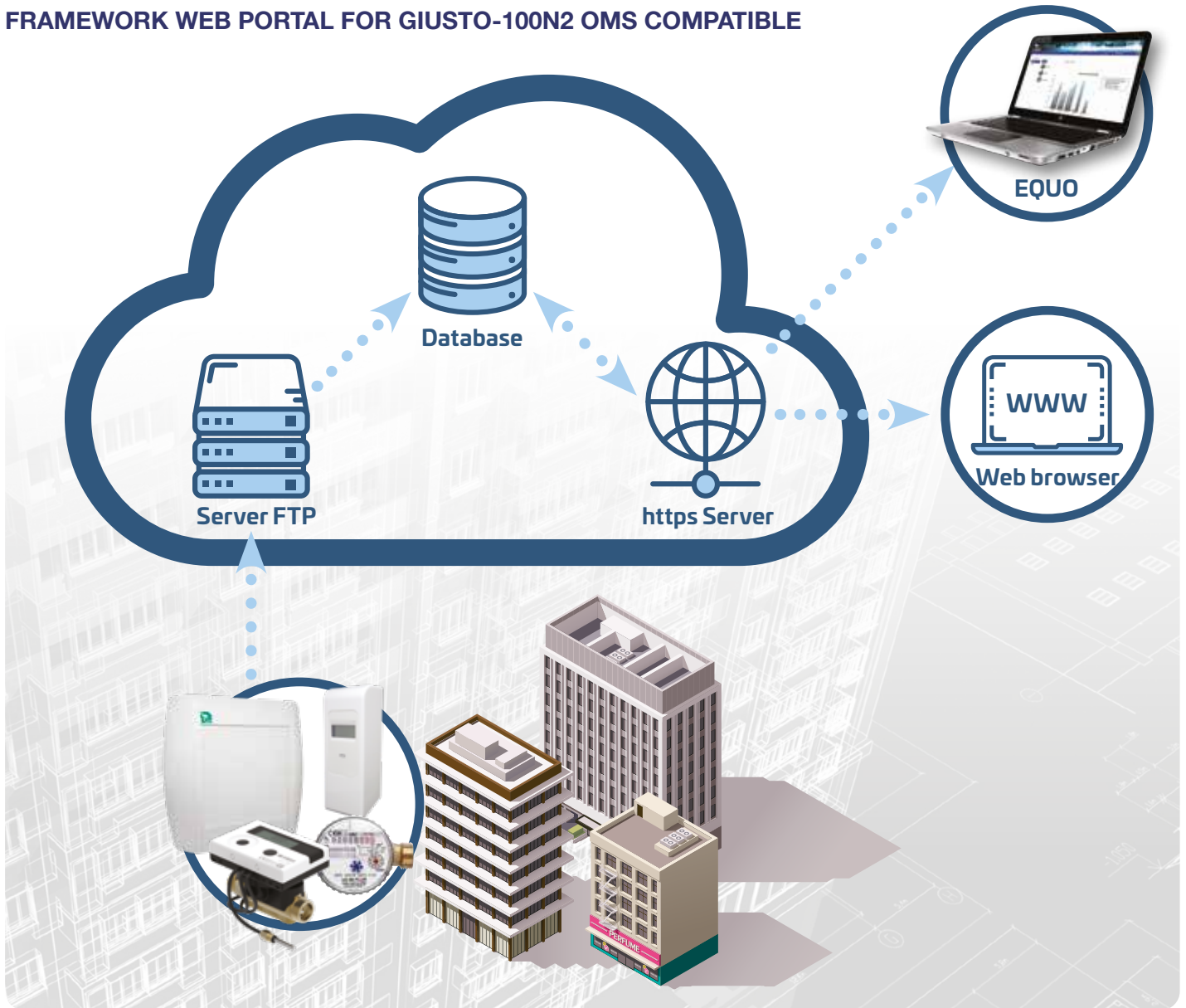
1SE 100802 WSL key
(Wireless Serial Link) for radio communication from the outside of the building between laptop and allocators / pulse counters via EQUO software. Necessary to carry out readings onsite and to manage the devices. The key allows up to 10.000 parameterizations.

1SE 100809 Replacement antenna for WSL key

FRAMEWORK WEB PORTAL FOR GIUSTO-100N2 OMS COMPATIBLE

FEATURES

As for the current standards, with the aim of making the data available to the user in a clear and transparent way, the Web portal is born. The read data from the various metering devices are acquired with Nodo-1000R and Nodo-1000RG control units on a monthly basis. The infrastructure, designed to automatically post data on the FTP server, allows, once the web portal is activated, periodic consultation of the relevant consumptions.

The portal allows to be viewed:
- Heating Indirect consumptions measured with GIUSTO-100N2 / GIUSTO-100NE2
- Heating Direct consumptions measured with compact energy meter
- Consumption of domestic hot and cold water

The portal framework is designed to provide different information and different levels of interaction to the three intended user profiles: Apartment, Building Manager, Heat Manager

The profiles are specified below:

USER Apartment
(Apartment owner)

Logging into the web portal, this user can view the latest readings, the historical readings and the consumption trend of their own apartment.

USER Building Manager
(Building Administrator)

Logging into the web portal, this user can manage several Apartment users.
In particular, the Building Manager user can view the latest readings, the historical readings and the trends of the accounting devices of all condominiums managed by this user

USER Heating Manager

Logging into the web portal, this user manages the Building Manager and Apartment users.
The Manager user has all the write and read privileges.

ELECTRIC PERRY

- **Programmable thermostat connected to internet. It's programmable and readable by smartphone, tablet e PC.**
- **Expandable (up to 30 devices, included max 1 energy meter) for zone valves control.**

1TX CR028WIFIKIT
Starter kit: 1 Wi-Fi programmable thermostat 1TX CR028WIFI + 1 Smartbox 1TX RX01WIFI
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

The ready-to-use solution to adjust the temperatures of your home directly from your smartphone.
The kit includes the 1TX CR028WIFI chronothermostat and the Smartbox 1TX RX01WIFI.

1TX CR028WIFI - 3V
Wi-Fi programmable thermostat 3V with radio receiver 868.35MHz, white color
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

Backlit display

- Power supply 3V – 2x1.5V AA alkaline batteries
- Output: 1 potential free changeover contact: 5 (3) A / 250V a.c.
- 4.3" backlit LCD display
- Backlit buttons
- ON / OFF operation mode with adjustable differential from (0.2-0.3-0.5-0.7° C) or modulating (control period 10/15/20/25 minutes)
- Up to 10 daily programs

- Summer / Winter control
- Temperature adjustable by 0,5°C sets
- Minimum programming: 1 minute
- Holiday Program (energy saving)
- Pump activation program
- Timed backlighting
- Keyboard lock
- Wall mounting
- Dimensions (LxWxH) 128.5 x 88.5 x 26 mm

The programmable thermostat WI-FI PERRY powered by 3 V alkaline batteries (it doesn't need 230V), allows to change easily and quickly the traditional thermostats.

1TX RX01WIFI
Smartbox 5V for Wi-Fi Programmable thermostat 3V with radio receiver 868.35MHz
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

- Power supply 5V 350 mA (Powered by an external micro USB adapter)
- PCB antenna build in

- Connected via Ethernet cable RJ45 to the router (included)
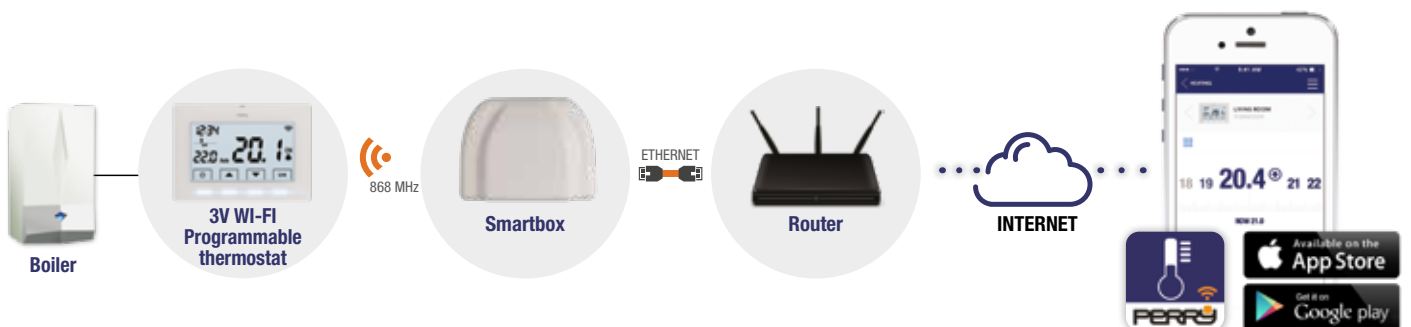- Dimensions (LxWxH) 102 x 35 x 77 mm

1TX ME01WIFI
Power meter with radio receiver 868.35MHz - 1 DIN
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

- Power supply 200-260V 50Hz
- PCB antenna build in

- Dimensions (LxWxH) 17,5 x 60 x 90 mm

Boiler — 3V WI-FI Programmable thermostat — 868 MHz — Smartbox — ETHERNET — Router — INTERNET

App Store — Google play

Backlit display

1TX CR029WIFI - 230V
Wi-Fi programmable thermostat 230V with radio receiver 868.35MHz, white color

- Power supply 230V - 50Hz
- Output: 1 potential free changeover contact: 5 (3) A / 250V a.c.
- 4.3" backlit LCD display
- Backlit buttons
- ON / OFF operation mode with adjustable differential from 0.2 to 1,2°C or modulating (control period from 7 to 20 minutes)
- Up to 10 daily programs

- Summer / Winter control
- Temperature adjustable by 0,5°C sets
- Minimum programming: 1 minute
- Holiday Program (energy saving)
- Pump activation program
- Timed backlighting
- Keyboard lock
- Wall mounting
- Dimensions (LxWxH) 128.5 x 88.5 x 26 mm

MULTI-INSTALLATION / MULTI-ZONE MANAGEMENT
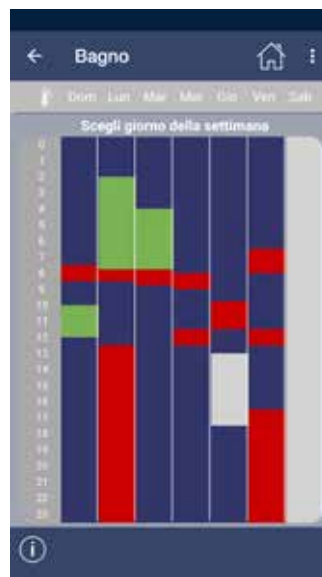To manage multiple devices in a home or in different systems.

TEMPERATURE SETTING
Simple and intuitive.

WEEKLY PROGRAMMING
Up to 10 levels of temperature per day.

VOICE ASSISTANTS
The new Perry Wi-fi programmable thermostat supports Alexa and Google Home. From now on, it will be easy to manage the home temperature.

WORKS WITH
amazon alexa

Ask to saloon programmable thermostat to set 21°C

EASY TO INSTALL
The new programmable thermostat CR029WIFI simplifies the installation and configuration operations. Using the Perry APP the parameters of time, date and time programming synchronize in few seconds.

ADVANCED SETTINGS
Temperature locks, offset, regulation for floor or traditional installation.

GEOLOCATION
It allows, depending on the positions of the tenants, to lower or raise the temperature. It guarantees a considerable energy consumption.

SHARING
App allows sharing the devices with other users (with setting limits). Function particularly useful in the family or in rented homes.

1CR CR028A - Anthracite color - 3V
1CR CR028B - White color - 3V
1CR CR029A - Anthracite color - 230V
1CR CR029B - White color - 230V
"NEXT" series menu driven weekly digital programmable thermostat

Keys lit in different colors depending on consumption

Backlit display

- Multilanguage menu
- Power supply: 3V 2x1,5AA alkaline batteries (CR028) 230V 50-60Hz (CR029)
- 4.3" backlit LCD display
- Output: 1 potential free changeover contact: 5(3)A/250V a.c.
- ON / OFF operation mode with adjustable differential from 0.2-1.2 ° C or modulating with control period from 7-20 min
- 4 preset modifiable programs
- Temperature levels: 3 + anti-freeze
- Independent manual temperature
- Temperature adjustable by 0,1°C sets
- Minimum programming: 30 minutes
- Temporary / permanent manual operation
- Automatic daylight saving time change

- Pausing for household cleaning
- Input for telephone programmer or remote contact
- Summer / Winter control
- Input for remote probe (CR028)
- Holidays program and pump activation program
- Temperature setting lock
- User / Installer password
- Backlighting: timed (CR028), timed and fixed (CR029)
- Relay status indicator
- Maintenance settings during blackout 48-hour (CR029)
- Temperature offset: adjustable according to product positioning
- Temperature setting range: 5 - 37.7°C
- Dimensions: (L x W x H) 128.5 x 88.5 x 26 mm

1PA STE02 NTC temperature probe with 4 m cable, for CRO28

Detection probe with 2x1.5 mm^2 shielded cable - IP65 - Extendable up to max. 20 m.
The probe allows temperature sensing in another room, underfloor or outside.

Time and standard heating program are preset at the factory and can be modified by the user at any time
1CR CR017AG - Anthracite color - Daily
1CR CR017BG - White color - Daily
1CR CR018AS - Anthracite color - Weekly
1CR CR018BS - White color - Weekly
"UP & DOWN Compact" digital programmable thermostat 3V series

- Power supply 3V - 2x1.5V AAA alkaline
- 4" ½ LCD display
- 1 potential-free changeover contact output: 5(2)A/250V a.c.
- 10 Temperature levels + anti-freeze
- Minimum programming time 60 minutes
- Temperature offset: adjustable according to product positioning (winter / summer)
- Automatic daylight saving time adjustment
- Preset at the factory
- ON / OFF operation mode with adjustable differential switch or proportional with control period 7/10/13/20'

- 3 operation modes: intelligent / eco / optimised
- Temporary / permanent manual operation modes
- Autonomy: 12 months
- Holiday Program and pump activation program
- Pausing for household cleaning
- Temperature setting lock
- Keypad lock
- Password protection for access to keyboard
- Heating setting range: 15-17-18-19-20-20,5-21-22-23-24°C
- Cooling setting range: 20-22-23-24-25-26-27-28-32-36°C
- Dimensions (L x W x H) 133 x 26 x 90 mm

1CR CR311B
"SLIM" serie digital programmable thermostat

- Multilanguage menu
- Power supply 3V - 2x1.5V AAA alkaline
- 1 potential-free changeover contact output: 5(2)A/250V a.c.
- ON / OFF operation mode with adjustable differential from 0.2-1.2 ° C or modulating with control period from 7-20 min
- 4 preset modifiable programs
- Temperature levels: 3 + anti-freeze
- Independent manual temperature
- Temperature adjustable by 0,1°C sets
- Minimum programming: 30 minutes
- Independent manual temperature
- Automatic daylight saving time change

- Summer / Winter control
- Holiday Program and pump activation program
- Pausing for household cleaning
- Temperature setting lock
- User / Installer password
- Autonomy: 12 months
- Relay status indicator
- Temperature offset: adjustable according to product positioning
- Temperature setting range: 5 - 37.7°C
- Dimensions: (L x W x H) 120 x 21 x 80 mm

1CR CR308/G - Daily
1CR CR309/S - Weekly
"EASY" series digital analogue programmable thermostat 3V - white color

- Power supply 3V - 2x1.5V AA alkaline
- 2" 2/3 LCD display
- 1 potential-free changeover contact output: 5 (3)A/250V a.c.
- ON / OFF operation with adjustable differential switch 0.3/0.5/0.7 0.9°C or adjustable proportional cycle 7/10/15/20 min
- Temperature adjustment on display
- Temperature levels 2 + anti-freeze fixed at 5°C

- Autonomy: 24 months
- Minimum programming 30 minutes
- Permanent manual operation
- Total ON / OFF function
- Temperature lock
- Telephone control input
- Temperature setting range: 5 - 37.7°C
- Dimensions (L x W x H) 121.5 x 31.5 x 82 mm

THERMOSTATS - WALL MOUNTED

1TP TE028A - Anthracite color - 3V
1TP TE028B - White color - 3V
1TP TE029A - Anthracite color - 230V
1TP TE029B - White color - 230V
"NEXT" series menu driven daily digital thermostat

Backlit display

- Power supply: 3V 2x1,5AA alkaline batteries (TE028)
  230Vac 50-60Hz (TE029)
- Multilanguage menu
- 4.3" backlit LCD display
- Backlit buttons
- Output: 1 potential free changeover contact:
  5 (3) A / 250Va.c.
- ON / OFF operation mode with adjustable differential
  from 0.2 - 1.2 ° C or modulating with control period from
  7 - 20'
- Temperature levels: 2 + anti-freeze
- Temperature adjustable by 0,1°C sets
- Pausing for household cleaning
- Input for telephone programmer or remote contact

- Input for remote probe (TE028)
- Summer / Winter control
- Pump activation program
- Temperature setting lock
- User password
- Installer password
- Backlighting: timed (TE028), timed and fixed (TE029)
- Relay status indicator
- Temperature offset: adjustable according to product
  positioning
- Wall mounting
- Temperature setting range: 5 - 37.7°C
- Dimensions: (L x W x H) 128.5 x 88.5 x 26 mm

Keys lit in different colors depending on consumption

Below 18,0 °C the keys light up in green indicating low consumption

Between 18,1 °C and 21 °C the keys light up in blue indicating optimal consumption

Above 21,1 °C the keys light up in red indicating consumtion over needs

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1PA STE02 NTC temperature probe with 4 m cable, for CRO28

Detection probe with 2x1.5 mm^2 shielded cable - IP65 - Extendable up to max. 20 m.
The probe allows temperature sensing in another room, underfloor or outside.

1TP TE530B - 3V
1TP TE531B - 230V
"ZEFIRO" series 80 x 80 digital thermostat, white color

- Power supply: 3V 2x1.5V AAA alkaline batteries (TE530B)
  230V a.c. 50-60Hz (TE531B)
- 2" 1/3 LCD display
- 1 potential-free changeover contact output:
  5 (3) A / 250Va.c.
- ON / OFF operation with adjustable differential switch
  0.2 - 1,2°C or proportional with 7/20' control period
- Temperature levels 2 + anti-freeze
- Temperature adjustable by 0.1°C sets

- LOW BAT indicator (TE530B)
- Autonomy: 24 months (TE530B)
- Relay status indicator
- SUM/WIN control
- Temperature setting lock
- Temperature offset: adjustable according to product
  positioning
- Temperature setting range: 5 - 37.7°C
- Dimensions (L x W x H) 84 x 23 x 84 mm

1TP TE532B
"ZEFIRO" series 80x80 digital thermostat 230V, for public areas white color

- Power supply 230V a.c. 50-60Hz
- 2" 1/3 LCD display
- 1 potential-free changeover contact output:
  5 (3) A / 250Va.c.
- ON / OFF operation with adjustable differential switch
  0.2 - 1,2°C or proportional with 7/20 minutes control
  period
- Temperature levels 2 + anti-freeze
- Temperature adjustable by 0.1°C sets
- Temperature setting range: 5 - 37.7°C

- Dimensions (L x W x H) 89,7 x 27 x 87,4 mm

Inaccessible controls, reserved to installer:
- temperature SET adjustment
- SUM / WIN control
- on /off
- adjustment settings
- Temperature offset: adjustable according to product
  positioning

THERMOSTATS - WALL MOUNTED

1TP TE011B
"SLIM" series 3V digital thermostat, white color

- Power supply: n° 2 Alkaline stilo batteries 1,5 V type AAA (LR0 3)
- 2,6" LCD display
- Multilanguage menu
- Type of output: voltage free relay with COM / NO / NC changeover contact - max 5(3)A/250 V ~
- Type of temperature adjustment: differential ON/ OFF adjustable from 0.2 °C to 1.2 °C or modulating proportional cycles adjustable from 7 to 20 minutes
- Number of temperature levels: 2+antifreeze
- Setting temperature Set: in step of 0.1 °C
- Ambient temperature display range: -5 °C ÷ + 37.7 °C

- Winter and Summer mode)
- Pump activation program
- Temperature set lock
- User password
- Installer password
- Relay ON signal
- Autonomy: more than 1 year
- Wall mount
- Temperature correction: adjustable from -3.0 °C to +3.0 °C
- Dimensions (LxWxH) 120 x 21 x 80 mm

1TP TE400/B - 3V
1TP TE410/B - 230V
"SLIM" series digital thermostat with ON / OFF / NIGHT REDUCTION control, white color

- Power supply: 3V 2x1.5V AAA alkaline batteries (TE400/B) 230V c.a. 50-60Hz (TE410/B)
- 1" LCD display
- 1 potential-free changeover contact output: 8 (2) A / 250V a.c.
- ON / OFF operation with settable differential switch 0.3 / 0.5 / 0.7 / 0.9°C
- Adjustment according to a graduated scale with analogue and digital setting
- Autonomy: 12 months (TE400/B)

- 1 temperature level with continuous adjustment + fixed reduced control -4°C on the set value
- ON / OFF / NIGHT REDUCTION control
- LOW BAT indicator LED
- Relay status indicator LED
- Remote night reduction control input
- Max Temperature setting lock
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 120 x 21 x 80 mm

1TP TE402/B - 3V
1TP TE411/B - 230V
"SLIM" series digital thermostat with SUMMER / OFF / WINTER control, white color

- Power supply: 3V 2x1.5V AAA alkaline batteries (TE402/B) 230V c.a. 50-60Hz (TE411/B)
- 1" LCD display
- 1 potential-free changeover contact output: 8 (2) A / 250V a.c.
- ON / OFF operation with settable differential switch 0.3 / 0.5 / 0.7 / 0.9°C
- Adjustment according to a graduated scale with analogue and digital setting
- Autonomy: 12 months (TE402/B)

- 1 temperature level with continuous adjustment + fixed reduced control -4°C on the set value
- SUMMER / OFF / WINTER control
- LOW BAT indicator LED
- Relay status indicator LED
- Remote night reduction control input
- Max Temperature setting lock
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 120 x 21 x 80 mm

1TP TE500A - Anthracite color
1TP TE500B - White color
"ZEFIRO" series electronic thermostat with LED

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 8 (2) A / 250V a.c.
- ON / OFF operation with fixed differential at 0.4°C
- Temperature adjustment on graduated scale with mechanical index set-point
- 1 temperature level with continuous adjustment
- Wall mounting or semi recess

- Remote input for night reduction -4°C on the set-point value
- Set-point with mechanical max temperature lock
- Relay status indicator LED
- Mains connection indicator LED
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 120 x 27.5 x 81 mm

1TP TE501A - Anthracite color
1TP TE501B - White color
"ZEFIRO" series electronic thermostat with ON / OFF control

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 8 (2) A / 250V a.c.
- ON / OFF operation with fixed differential at 0.4°C
- ON / OFF control
- Temperature adjustment on graduated scale with mechanical index set-point
- 1 temperature level with continuous adjustment

- Wall mounting or semi recess
- Remote input for night reduction -4°C on the set-point value
- Set-point with mechanical max temperature lock
- Relay status indicator LED
- Mains connection indicator LED
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 120 x 27.5 x 81 mm

1TP TE502B
"ZEFIRO" series electronic thermostat with floor probe, white color

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output:
  8 (2) A / 250V a.c.
- ON / OFF operation with fixed differential at 0.4°C
- ON / OFF control
- Temperature adjustment on graduated scale with
  mechanical index set-point
- 1 temperature level with continuous adjustment

- Wall mounting
- Remote input for night reduction -4°C on the set-point
  value
- Set-point with mechanical max temperature lock
- Relay status indicator LED
- Mains connection indicator LED
- Temperature setting range: 0 - +60°C
- Dimensions (L x W x H) 120 x 27.5 x 81 mm

1TP TE503A - Anthracite color
1TP TE503B - White color
"ZEFIRO" series electronic thermostat with SUMMER / WINTER control

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output:
  8 (2) A / 250V a.c.
- ON / OFF operation with fixed differential at 0.4°C
- SUMMER / OFF / WINTER control
- Temperature adjustment on graduated scale with
  mechanical index set-point
- 1 temperature level with continuous adjustment

- Wall mounting or semi recess
- Remote input for night reduction -4°C on the set-point value
- Set-point with mechanical max temperature lock
- Relay status indicator LED
- WINTER / SUMMER indicator LED
- Mains connection indicator LED
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 120 x 27.5 x 81 mm

1TP TE565B
"ZEFIRO" series electronic thermostat for Fan Coil with SUMMER / OFF / WINTER control, white color

- Power supply 230V a.c. 50-60Hz
- 1 polarized NO contact output: 5 (2) A / 250V a.c.
- Proportional operation with fixed control period
- SUMMER / OFF / WINTER control
- I° II° III° Speed control
- Temperature adjustment on graduated scale with
  mechanical index set-point

- 1 temperature level with continuous adjustment
- Set-point with mechanical max temperature lock
- Relay status indicator LED
- SUMMER / WINTER indicator LED
- Power supply indicator LED
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 120 x 27.5 x 81 mm

1TP TE566B
Electronic thermostat "EUROPA" series for "Fan Coil" with SUMMER / OFF / WINTER control, white color

- Power supply 230V a.c. 50-60Hz
- 1 polarized NO contact output: 5 (2)A / 250V a.c.
- Proportional operation with fixed control period
- SUMMER / OFF / WINTER control
- Temperature adjustment on graduated scale with
  mechanical index set-point

- I° II° III° Speed control
- 1 Temperature level with continuous adjustment
- Set-point with mechanical max temperature lock
- Relay status indicator LED
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 36 x 74 mm

1TP TE041
"EUROPA" series electronic thermostat, with SUMMER / WINTER control, white color

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output:
  5 (2) A / 250V a.c.
- ON / OFF operation with adjustable differential switch
  0,2 - 2,5°C
- SUMMER / WINTER control

- 1 Temperature level with continuous adjustment
- Set-point with mechanical temperature lock
- Relay status indicator LED
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 36 x 74 mm

1TP TE046
"EUROPA" series electronic thermostat, with ON / OFF control, white color

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output:
  5 (2) A / 250V a.c.
- ON / OFF operation with adjustable differential switch
  0,2 - 2,5°C
- ON / OFF control

- 1 Temperature level with continuous adjustment
- Set-point with mechanical temperature lock
- Relay status indicator LED
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 36 x 74 mm

1TP TE065
"EUROPA" series electronic thermostat for "Fan Coil" with SUMMER / OFF / WINTER control, white color

- Power supply 230V a.c. 50-60Hz
- 1 polarized NO contact output: 5 (2) A / 250V a.c.
- Proportional operation with fixed control period
- SUMMER / OFF / WINTER control
- 0 I° II° III° Speed control
- Relay status indicator LED

- Temperature adjustment on graduated scale with mechanical index set-point
- 1 Temperature level with continuous adjustment
- Set-point with mechanical temperature lock
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 36 x 74 mm

1TG TEG130
"TEG" series gas expansion thermostat without LED indicator, white color

- 1 potential-free changeover contact output: 10 (2) A / 250V a.c.
- ON / OFF operation with fixed differential switch
- 1 temperature level with continuous adjustment

- Temperature adjustment on graduated scale with mechanical index set-point
- Set-point with mechanical temperature lock
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 40 x 74 mm

1TG TEG131
"TEG" series gas expansion thermostat with LED indicator, white color

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 10 (2) A / 250V a.c.
- ON / OFF operation with fixed differential switch
- Temperature adjustment on graduated scale with mechanical index set-point

- 1 temperature level with continuous adjustment
- Set-point with mechanical temperature lock
- ON / OFF indicator LED of the connected load
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 40 x 74 mm

1TG TEG131RA
"TEG" series gas expansion thermostat with LED indicator and Accelerating resistance, white color

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 10 (2) A / 250V a.c.
- ON / OFF operation with fixed differential switch
- Temperature adjustment on graduated scale with mechanical index set-point

- 1 temperature level with continuous adjustment
- Set-point with mechanical temperature lock
- Accelerating resistance
- ON / OFF indicator LED of the connected load
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 40 x 74 mm

1TG TEG132
Electronic thermostat "TEG" series with LED indicator and ON / OFF control, white color

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 10 (2) A / 250V a.c.
- ON / OFF operation with fixed differential switch
- ON / OFF control
- 1 temperature level with continuous adjustment

- Temperature adjustment on graduated scale with mechanical index set-point
- Set-point with mechanical temperature lock
- ON / OFF indicator LED of the connected load
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 40 x 74 mm

1TG TEG136
Electronic thermostat "TEG" series with LED indicator and SUMMER / WINTER control, white color

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 10 (2) A / 250V a.c.
- ON / OFF operation with fixed differential switch
- SUMMER / WINTER control
- 1 temperature level with continuous adjustment

- Temperature adjustment on graduated scale with mechanical index set-point
- Set-point with mechanical temperature lock
- ON / OFF indicator LED of the connected load
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 74 x 40 x 74 mm

1PA TEG03B "TEG"series base for thermostat installation

Base for TEG" thermostat installation "in round and / or rectangular recessed boxes

CONTROL BOXES

FUNCTIONAL FEATURES

The control boxes are electronic devices equipped with 4-8 inputs and 4-8 outputs for control of opening / closing of the electro valves mounted on distribution manifolds. Intelligent operation mode to start or stop any circulation pump installed in the hydraulic distribution box and / or the circulation pump of the individual boiler and / or the zone valve. When all the electro valves are close, the control box stops the pump / zone valve. When even only one of electro valves is open, the control box restarts the pump or the zone valve.
Input for the connection of a time switch for programming the operating times of the heating system of the apartment (and of offices) and input for remote control switching of the system for winter / summer mode.
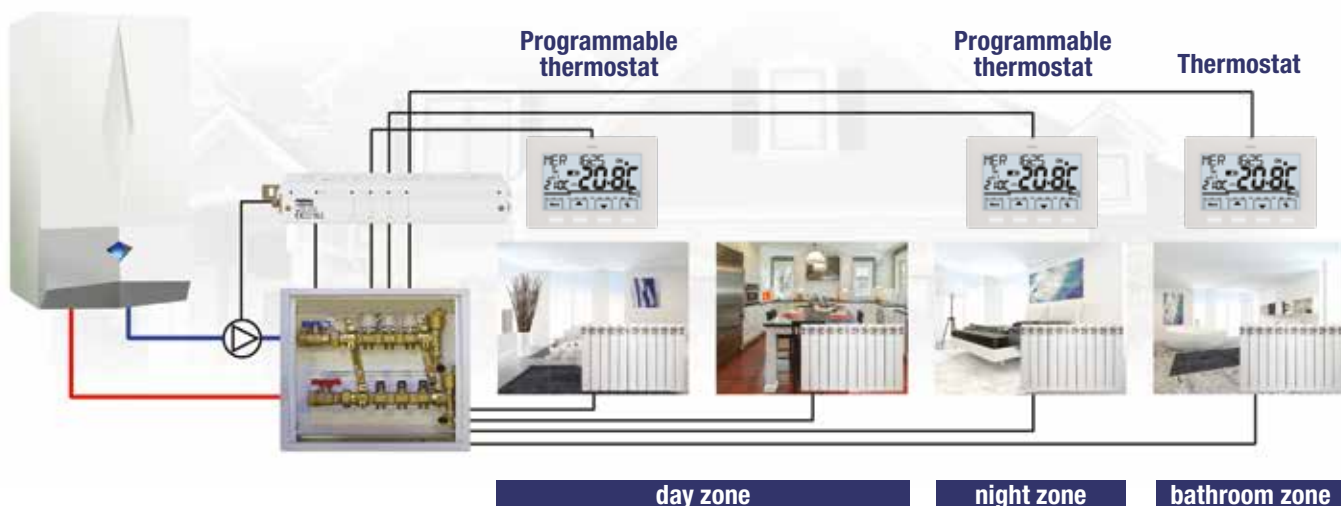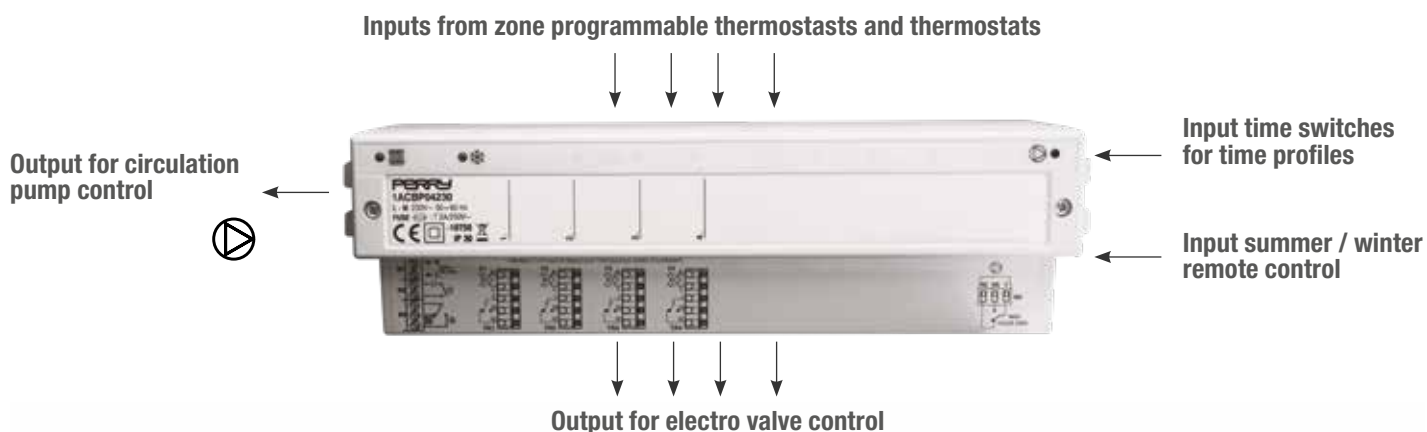
1AC BP04230
4-zones control box with 4 +1 relay outputs

- Power supply 230V a.c. - 50Hz
- Potential-free changeover contacts: 10 A / 250V a.c.
- 4 controllable zones
- Output for active pump control with at least one open zone valve
- Output controlled by a time switch
- Remotely controlled SUM / WIN output
- WINTER operation indicator LED
- SUMM ER operation indicator LED
- ON / OFF pump
- control indicator LED
- Protection degree IP 30
- Dimensions (L x W x H) 250 x 76 x 43 mm

1AC BP08230
4-zones control box with 8 +1 relay outputs

- Power supply 230V a.c. - 50Hz
- Potential-free changeover contacts: 10 A / 250V a.c.
- 8 controllable zones
- Output for active pump control with at least one open zone valve
- Output controlled by a time switch
- Remotely controlled SUM / WIN output
- WINTER operation indicator LED
- SUMM ER operation indicator LED
- ON / OFF pump
- control indicator LED
- Protection degree IP 30
- Dimensions (L x W x H) 250 x 76 x 43 mm

Inputs from zone programmable thermostasts and thermostats

Output for circulation pump control

Input time switches for time profiles

Input summer / winter remote control

Output for electro valve control

Programmable thermostat   **Programmable thermostat**   **Thermostat**

day zone   **night zone**   **bathroom zone**

1TX CRTX05 Wireless weekly digital programmable thermostat with 868.35 MHz RF output - white color
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

- Power supply 3V - 2x1.5V AA alkaline batteries
- 3" ¾ LCD display
- ON / OFF operation with adjustable differential switch 0.2 - 0.7°C
- 2 temperature levels + anti-freeze (excludable or adjustable)
- 3 preset programs (modifiable)
- Minimum programming time 30 minutes
- MASTER function
- 3 years autonomy

- Temperature settings protected by password
- Adjustable temperature range: 5 - 39,9°C
- Automatic daylight saving time change
- SUMMER / WINTER option
- Possibility of correction of the detected room temperature (OFFSET).
- Interruption button for cleaning operations
- Range: 30 - 130m
- Dimensions: (L x W x H) 120 x 21 x 80 mm

1PA BTCRTX01 Table base for wireless programmable thermostat

1TX TETX04 Wireless daily digital thermostat with 868.35 MHz RF output - white color
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

- Power supply 3V - 2x1.5V AA alkaline batteries
- 2" ⅓ LCD display
- ON / OFF operation with adjustable differential switch 0.2 - 0.7°C
- 2 temperature levels + anti-freeze (excludable or adjustable)
- 3 years autonomy
- SUMMER / WINTER option
- Temperature settings protected by password

- Operational safety is ensured by a double transmission of information to the receiver
- Possibility of correction of the detected room temperature (OFFSET).
- Indication of ON status and LOW battery
- Adjustable temperature range: 5 - 39,9°C
- Range: 30 - 130m
- Dimensions (L x W x H): 84 x 23 x 84 mm

1PA BTTETX01 Table base for thermostat TETX04

1TX CCRX01 Status control unit zone 868.35MHz - white color
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

The control unit activates the load (pump boiler) with at least one open electronic valve

- Power supply 230V a.c. 50Hz
- 1 potential-free changeover contact output: 5 (2) A / 250V

- Reception frequency: 868.35Mhz
- RF signal level indicator
- Dimensions (L x W x H) 133 x 25 x 90 mm

1TX RX01/P 1-zone wall-mounted radio receiver - white color
1TX RX02/P 2-zones wall-mounted radio receiver + 1 circulation pump output - white color
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

- Power supply 230V a.c. 50-60Hz
- Reception frequency: 868.35Mhz
- 1TX RX01/P: 1 potential-free changeover contact output: 5 (2)A / 250V a.c.
  1TX RX02/P: 2 potential-free changeover contacts output: 5 (2) A / 250V + 1 Output to control the

circulation pump 5 (2) A / 250V a.c.
- Manual ON / OFF control
- RF signal level indicator
- Dimensions (L x W x H) 133 x 25 x 90 mm

1TX RX0801/P 8-zones wall-mounted radio receiver + 1 circulation pump output - white color
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

- 18V power supply via BUS
- Reception frequency: 868.35Mhz
- BUS RS 485 output for 8-output control + 1 circulation pump control output
- Manual ON / OFF control

- RF signal level indicator
- Signal to control the activated circulation pump
- Adjustable pump control delay 0" or 120"
- Dimensions (L x W x H) 133 x 25 x 90 mm

1TX BC0401/230 4-zones Control box
1TX BC0801/230 8-zones Control box
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

- Power supply 230V a.c. 50-60Hz
- 4 polarized outputs at 230V (1TX BC0401/230)
  8 polarized outputs at 230V (1TX BC0801/230)
- Load 8 (2) A / 250V a.c. + 1 output to control the circulation pump 8 (2) A / 250V a.c.
- IP 32 (IP 52 with accessory cable glands)

- Connection to receiver RX0801/P with BUS RS 485
- Fault indicator LED
- ON / OFF pump status indicator LED
- mains presence indicator LED
- ON / OFF zone status indicator LED
- Dimensions (L x W x H) 250 x 76 x 43 mm

1TX VTRX02 Electronic actuator for water radiators with 868,35 MHz RF transceiver - white color
Product complying the radio devices Directive 2014/53/UE and RoHS 2011/65/UE

• Power supply 3V - 2x1.5V type C alkaline batteries
• Approx. lifetime 3 years
• ON / OFF operation
• RF signal level indicator
• IP 40

• Fault and / or battery charge indicator
• Valve opening / closing condition indicator
• Threaded coupling for radiators with adaptation ring
  nut for the main thermostatic valves
• Dimensions: (L x W x H): 62 x 70 x 97 mm

KITS FOR EXISTING SYSTEMS

1TX CRTX05RX01
Kit including 1 radio programmable thermostat + 1 wall-mounted 1-zone radio receiver 1TX RX01/P

CRTX05 programmable thermostat adjusts the time profiles and the temperature settings in the house. The RX01/P radio receiver activates / deactivates the connected load (pump, boiler, ...) according to the heat demand of the programmable thermostat.

1TX TETX04RX01
Kit including 1 radio thermostat + 1 wall-mounted 1-zone radio receiver 1TX RX01/P

TETX04 thermostat adjusts the temperature settings in the house. The RX01/P radio receiver activates / deactivates the connected load (pump, boiler, ...) according to the heat demand of the thermostat.

ACCESSORIES

1PA ASVT01 Angle adapter for electronic valves on radiators
It allows the vertical installation of the electronic valves on the radiators

1PA PPBC01 Cable glands for control boxes
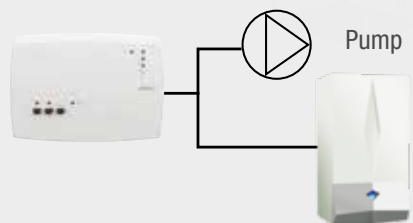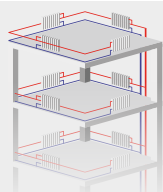Package consists of n° 11 cable glands for control boxes, protection degree IP52

Zone 1
Programmable thermostat
CRTX05

Zone 2
Thermostat
TETX04

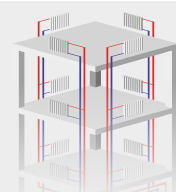**SINGLE OR CONDOMINIUM APARTMENT WITH HORIZONTAL PIPING SYSTEM**

Pump

Zone 1
Internal probe
Programmable thermostat
VTRX02

Zone 2
Internal probe
Thermostat
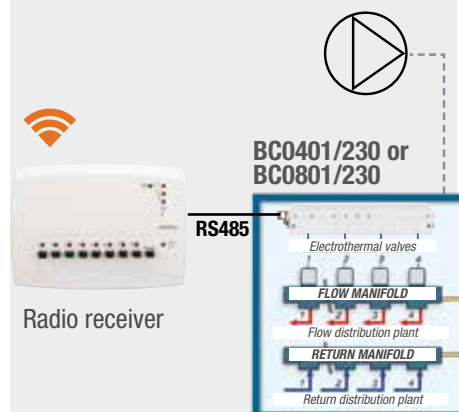
CONDOMINIUM APARTMENT WITH VERTICAL PIPING SYSTEM

Zone 1
Internal probe
Programmable thermostat
VTRX02

Zone 2
Internal probe
Thermostat

NEW OR RENOVATED APARTMENTS WITH DISTRIBUTION BOX

Radio receiver

BC0401/230 or BC0801/230

RS485

Electrothermal valves

FLOW MANIFOLD

Flow distribution plant

RETURN MANIFOLD

Return distribution plant

Zone 1
Internal probe
Programmable thermostat

Zone 2
Internal probe
Thermostat

1TM TE082
Electronic thermostat with adjustment on 2 temperature levels Comfort and Reduction - 2 DIN

- Power supply: 230V a.c. - 50Hz
- 1 potential-free changeover contact output:
  16 (3) A / 250V a.c.
- ON / OFF operation with adjustable differential switch 0.5-2.5°C
- ON / OFF / ANTI-FREEZE control
- Comfort / reduction / automatic remote selection control
- 2 graduated scales with adjustment index
- 2 temperature levels with continuous adjustment
- Adjustable night reduction remote input

- Set-point with mechanical temperature lock
- Relay status indicator LED
- Comfort indicator LED
- Night reduction indicator LED
- Equipped with NTC-type remote probe, with white and anthracite caps to be recessed in wiring devices blind plug, extendedable up to max. 100 m with shielded cable
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 35 x 60 x 128 mm

1TM TE083
Electronic thermostat with ON / OFF / ANTI-FREEZE - 2 DIN

- Power supply 230V a.c. - 50Hz
- 1 potential-free changeover contact output:
  16 (3) A / 250V a.c.
- ON / OFF operation with adjustable differential switch 0.5-2.5°C
- ON / OFF / ANTI-FREEZE control
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment
- Adjustable night reduction remote input

- Relay status indicator LED
- Night reduction indicator LED
- Equipped with NTC-type remote probe, with white and anthracite caps to be recessed in wiring devices blind plug, extendedable up to max. 100 m with shielded cable
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 35 x 60 x 128 mm

1TM TE084
Electronic thermostat with SUMMER / OFF / WINTER - 2 DIN

- Power supply 230V a.c. - 50Hz
- 1 potential-free changeover contact output:
  16 (3) A / 250V a.c.
- ON / OFF operation with adjustable differential switch 0.5-2.5°C
- SUMMER / OFF / WINTER control
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment
- Adjustable night reduction remote input

- Relay status indicator LED
- Night reduction indicator LED
- Equipped with NTC-type remote probe, with white and anthracite caps to be recessed in wiring devices blind plug, extendedable up to max. 100 m with shielded cable
- Temperature setting range: 5 - 30°C
- Dimensions (L x W x H) 35 x 60 x 128 mm

1TM TE052/M
Electronic thermostat for switchboards - 2 DIN

For switchboards cooling and anti-condensation
- Power supply 230V a.c. - 50Hz
- 1 potential-free changeover contact output:
  16 (3)A / 250V a.c.
- ON / OFF operation with fixed differential switch 2°C
- 2 graduated scales with adjustment index
- Cooling adjustment range +20°C / +60°C
- Anticondensation adjustment range +0°C / +10°C
- 2 temperature levels with continuous adjustment

- Remote probe input
- Relay status indicator LED
- Damaged probe indicator LED
- Equipped with NTC-type remote probe, with white and anthracite caps to be recessed in wiring devices blind plug, extendedable up to max. 100 m with shielded cable
- Dimensions (L x W x H) 35 x 60 x 128 mm

1TM TE075
Electronic thermostat -30 / +30°C - 2 DIN

- Power supply 230V a.c. - 50Hz
- 1 potential-free changeover contact output:
  16 (3) A / 250V a.c.
- ON / OFF operation with fixed differential switch 1°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment

- Remote probe cable length max. 100m
- Remote probe input
- Adjustment range -30°C / +30°C
- Relay status indicator LED
- Damaged probe indicator LED
- Dimensions (L x W x H) 35 x 60 x 128 mm

1TM TE076
Electronic thermostat -20 / +40°C - 2 DIN

- Power supply 230V a.c. - 50Hz
- 1 potential-free changeover contact output:
  16 (3) A / 250V a.c.
- ON / OFF operation with fixed differential switch 1°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment
- Remote probe input

- Remote probe cable length max. 100m with shielded cable
- Adjustment range -20°C / +40°C
- Relay status indicator LED
- Damaged probe indicator LED
- Dimensions (L x W x H) 35 x 60 x 128 mm

1TM TE077
Electronic thermostat 0 / +60°C - 2 DIN

- Power supply 230V a.c. - 50Hz
- 1 potential-free changeover contact output:
  16 (3) A / 250V a.c.
- ON / OFF operation with fixed differential switch 1°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment
- Remote probe input

- Remote probe cable length max. 100m with shielded cable
- Adjustment range 0°C / +60°C
- Relay status indicator LED
- Damaged probe indicator LED
- Dimensions (L x W x H) 35 x 60 x 128 mm

1TM TE078
Electronic thermostat 40 / +100°C - 2 DIN

- Power supply 230V a.c. - 50Hz
- 1 potential-free changeover contact output:
  16 (3) A / 250V a.c.
- ON / OFF operation with fixed differential switch 1°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment
- Remote probe input

- remote probe cable length max. 100m with shielded cable
- Adjustment range 40°C / +100°C
- Relay status indicator LED
- Damaged probe indicator LED
- Dimensions (L x W x H) 35 x 60 x 128 mm

1TM STE01 PTC temperature detection probe with 1.5m cable

Detection probe with shielded cable 2 x 1.5 mm^2 - IP 68 extendable up to max. 100m

1TM STE01/4 PTC temperature detection probe with 4m cable

Detection probe with shielded cable 2 x 1.5 mm^2 - IP 68 extendable up to max. 100m

1TC TB060
Contact thermostat for piping

- 1 potential-free changeover contact output:
  16 (5) A / 250V a.c.
- ON / OFF operation with fixed differential switch 4 ± 2°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment

- Installation in piping with supplied elastic strap
- Adjustment range +30°C / +90°C
- IP 20
- Dimensions (L x W x H) 54 x 56 x 99 mm

1TC TB065
Thermostat, immersion bulb

- 1 potential-free changeover contact output:
  16 (5) A / 250V a.c.
- ON / OFF operation with fixed differential switch 4 ± 2°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment
- Bulb diameter 8mm

- Bulb for immersion installation
- Adjustment range +30°C / +90°C
- IP 20
- Dimensions (L x W x H) 54 x 72 x 98.5 mm

1TC TB071
Thermostat with safety limiting device

- 1 potential-free changeover contact output:
  16 (5) A / 250V a.c.
- ON / OFF operation with fixed differential switch 4 ± 2°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment
- Bulb diameter 14mm

- Bulb for immersion installation
- Adjustment range +30°C / +90°C
- Safety limiting device T=100°C
- IP 20
- Dimensions (L x W x H) 108 x 56 x 98.5 mm

1TC TB081
Thermostat for hot air generators

- 1 potential-free changeover contact output:
  16 (5) A / 250V a.c.
- ON / OFF operation with fixed differential switch 4 ± 2°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment
- Bulb diameter 14mm

- Bulb for immersion installation
- Adjustment range +30°C / +90°C
- IP 20
- Installation in hot air generators
- Dimensions (L x W x H) 108 x 56 x 98.5 mm

1TC TB088
Thermostat with external probe +4 / +40°C

- 1 potential-free changeover contact output:
  16 (5) A / 250Va.c.
- ON / OFF operation with fixed differential switch 1,5 ± 1°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment

- Adjustment range +4°C / +40°C
- IP 20
- Dimensions (L x W x H) 72 x 45.5 x 136 mm

1TC TB090
Thermostat with external probe -5 / +35°C

- 1 potential-free changeover contact output:
  16 (5) A / 250V a.c.
- ON / OFF operation with fixed differential switch 1,5 ± 1°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment

- Adjustment range -5°C / +35°C
- IP 54
- Dimensions (L x W x H) 61 x 60 x 105 mm

1TC TB091
Thermostat with external probe +20 / +60°C

- 1 potential-free changeover contact output:
  16 (5) A / 250Va.c.
- ON / OFF operation with fixed differential switch 1,5 / -1°C
- Graduated scale with adjustment index
- 1 temperature level with continuous adjustment

- Adjustment range +20°C / +60°C
- IP 54
- Dimensions (L x W x H) 61 x 60 x 105 mm